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WHAT IS CLAIMED AS NEW AND IS DESIRED TO BE SECURED BY LETTERS PATENT OF THE UNITED STATES IS:

1. An image forming apparatus for making gray-scale images by performing at least one operation selected from the group consisting of: a manipulation of a plurality of dots arranged in matrix form, a single-dot-based density adjustment, and a single-dot-based size adjustment, said image forming apparatus comprising:

a dot status detector configured to detect an occurrence in which a dot exists at a focus dot position and no dot exists at positions immediately adjacent to the focus dot position in the main scanning direction; and

a density adjuster configured to adjust a writing level of the dot at the focus dot position to make a smooth gray-scale transition when the dot status detector detects the occurrence.

2. The image forming apparatus as defined in Claim 1, further comprising:

a dot phase adjuster configured to expand the dot in a direction right of a center of the dot when the dot status detector detects the occurrence and configured to expand the dot in a direction left of the center of the dot when the dot status detector does not detect the occurrence.

3. An image forming apparatus which generates gray-scale data by performing at least one operation selected from the group consisting of: a manipulation of a plurality of dots arranged in matrix form, a single-dot-based density adjustment, and a single-dot-based size adjustment, in accordance with commands sent from an external host system, said image forming apparatus comprising:

a writing level adjuster configured to adjust a writing level in accordance with at least one of a density of dots at positions adjacent a focus dot position and a size of the dots at the positions adjacent to the focus dot position; and

a gray-scale processor configured to generate gray-scale data of a line relative to input data when the commands relate to a line forming operation and to generate gray-scale data of an image relative to the input data when the commands relate to an image forming operation.

4. The image forming apparatus as defined in Claim 3, wherein the gray-scale processor is further configured to convert input data having a value other than 0 with a value of a lowest level among predetermined multiple levels.

5. The image forming apparatus as defined in Claim 4, further comprising:

a surrounding data detector configured to detect data of dots at positions immediately adjacent the focus dot position; and

a writing value changer configured to change writing values of the multiple levels in accordance with the data detected by the surrounding data detector.

6. The image forming apparatus as defined in Claim 3, wherein the gray-scale processor is configured to perform a dispersive gray-scale operation that generates gray-scale data of a line relative to the input data and configured to perform an intensive gray-scale operation that generates gray-scale data of an image relative to the input data.

7. An image forming apparatus for making gray-scale images by performing at least one operation selected from the group consisting of: a manipulation of a plurality of dots arranged in matrix form, a single-dot-based density adjustment, and a single-dot-based size adjustment, said image forming apparatus comprising:

dot status detecting means for detecting an occurrence in which a dot exists at a focus dot position and no dot exists at positions immediately adjacent the focus dot position in the main scanning direction; and

density adjusting means for adjusting a writing level of the dot at the focus dot position to make a smooth gray-scale transition when the dot status detecting means detects the occurrence.

8. The image forming apparatus as defined in Claim 7, further comprising:

dot phase adjusting means for expanding the dot in a direction right of a center of the dot when the dot status detecting means detects the occurrence and for expanding the dot in a direction left of the center of dot when the dot status detecting means does not detect the occurrence.

9. An image forming apparatus for generating gray-scale data by performing at least one operation selected from the group consisting of: a manipulation of a plurality of dots arranged in matrix form, a single-dot-based density adjustment, and a single-dot-based size adjustment, in accordance with commands sent from an external host system, said image forming apparatus comprising:

writing level adjusting means for adjusting a writing level in accordance with at least one of a density of dots at positions adjacent to a focus dot position and a size of the dots at the positions adjacent the focus dot position; and

gray-scale processing means for generating gray-scale data of a line relative to input data when the commands relate to a line forming operation and for generating gray-scale data of an image relative to the input data when the commands relate to an image forming operation.

10. The image forming apparatus as defined in Claim 9, wherein the gray-scale processing means comprises:

means for converting input data having a value other than 0 with a value of a lowest level among predetermined multiple levels.

11. The image forming apparatus as defined in Claim 10, further comprising:

surrounding data detecting means for detecting data of dots at positions immediately adjacent to the focus dot position; and

writing value change means for changing writing values of the multiple levels in accordance with the data detected by the surrounding data detecting means.

12. The image forming apparatus as defined in Claim 9, wherein the gray-scale processing means comprises:

means for performing a dispersive gray-scale operation for generating gray-scale data of a line relative to the input data and for performing an intensive gray-scale operation for generating gray-scale data of an image relative to the input data.

13. A method for forming gray-scale images by performing at least one operation selected from the group consisting of: a manipulation of a plurality of dots arranged in matrix form, a single-dot-based density adjustment, and a single-dot-based size adjustment, said method comprising the steps of:

detecting whether an occurrence exists in which a dot exists at a focus dot position and no dot exists at positions immediately adjacent the focus dot position in the main scanning direction; and

adjusting a writing level of the dot at the focus dot position to make a smooth gray-scale transition when the detecting step detects the occurrence.

14. The method as defined in Claim 13, further comprising the step of:

expanding the dot in a direction right of a center of the dot when the detecting step detects the occurrence, and expanding the dot in a direction left of the center of the dot when the detecting step does not detect the occurrence.

15. A method for generating gray-scale data by performing at least one operation selected from the group consisting of: a manipulation of a plurality of dots arranged in matrix form, a single-dot-based density adjustment, and a single-dot-based size adjustment, in accordance with commands sent from an external host system, said method comprising the steps of:

adjusting a writing level in accordance with at least one of a density of dots at positions adjacent a focus dot position and a size of the dots at the positions adjacent to the focus dot position; and

generating gray-scale data of a line relative to input data when the commands relate to a line forming operation and generating gray-scale data of an image relative to the input data when the commands relate to an image forming operation.

16. The method as defined in Claim 15, wherein the processing step comprises:

converting input data having a value other than 0 with a value of a lowest level among predetermined multiple levels.

17. The method as defined in Claim 16, further comprising the steps of:

detecting data of dots at positions immediately adjacent the focus dot position; and

changing writing values of the multiple levels in accordance with the data detected in the detecting step.

18. The method as defined in Claim 15, wherein the generating step comprises:

performing a dispersive gray-scale operation for generating gray-scale data of a line relative to the input data; and

performing an intensive gray-scale operation for generating gray-scale data of an image relative to the input data.